MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

PIM0245 – INTRODUCTION TO MULTIMEDIA TECHNOLOGY

(Foundation in Information Technology)

13 MARCH 2019
9.00 a.m. – 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **THREE** pages (excluding the cover page).
2. Answer **ALL** questions.
3. Write your answers in the Answer Booklet provided.

Instructions: Answer all questions. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

a. Write the best category of multimedia product for examples below:

(3 marks)

Example of multimedia product	Category
i. Youtube	
ii. Photomath	
iii. Google Search	
iv. DOTA 2	
v. Merriam-Webster Dictionary	
vi. Facebook	

b. Explain briefly the term of performance, delivery and interfaces used as developer's perspectives to evaluate multimedia product.

(3 marks)

c. Why platform need to be considered as a type of hardware component in multimedia system?

(1 mark)

d. Summarise the difference between alpha and beta testing as part of multimedia development process in terms of time to execute the test, purpose of the test and the testers.

(3 marks)

QUESTION 2 [10 Marks]

a. Explain briefly the component of multimedia interfaces below:

(4 marks)

i. Button
ii. Icon
iii. Hotspots
iv. Feedback

b. What is font? Give **ONE (1)** example to support your answer.

(1 mark)

c. Identify the drawback of rasterization process and how to resolve it.

(2 marks)

d. What is cel animation? Explain briefly how keyframes and tweening process work in this technique.

(3 marks)

Continued...

QUESTION 3 [10 Marks]

a. Identify **ONE (1)** file format used to compress graphics for web applications. Write **THREE (3)** characteristics for the selected format.

(3.5 marks)

b. Kim needs to upload a simple banner for advertisement to his company website. The image resolution of the banner is estimated at 700 X 200 and will be save as JPG (Joint Photographic Expert Group) file format. Calculate the estimated file size of the banner in KB. Show the calculation in details.

(2.5 marks)

c. Explain briefly the function of the following features which are included in an authoring tool.

(4 marks)

i. Organizing
ii. Playback
iii. Delivery Features
iv. Internet Playability

QUESTION 4 [10 Marks]

EduKids Sdn Bhd is in the midst of multimedia product development for children. This product will work as an encyclopedia for children to learn about animals. From the welcome page, the children will have 5 menus of animal classifications such as mammals, birds, amphibians, reptiles and fish. The content of this encyclopedia will include their habitats, origins, characteristics and breeding. This product will integrate pictures, audio and video to enhance children's understanding.

a. Identify the category for the above multimedia product. Write **TWO (2)** reasons to support your answer.

(2.5 marks)

b. Multimedia projects development require a broad range of skills from the team members either in the areas of computer technology or business and management. State **ONE (1)** example of a multimedia team member with its role.

(1.5 marks)

c. Illustrate the navigation structure for the above product.

(6 marks)

Continued...

QUESTION 5 [10 marks]

With the advent of the Internet, display has been revolutionized and when targeted for the World Wide Web, it is referred to as online display advertising, graphical advertising or digital display advertising.

a. These digital displays will commonly include videos and audios to attract user's interest. They can choose either to include a digital audio or just a simple Musical Instrument Digital Interface (MIDI). Explain briefly about MIDI.

(1 mark)

b. In Malaysia, file size is one of the issues that need consideration in any multimedia product due to the usage of graphics, videos and audios. Based on Table 1, calculate the estimated file size for this video and write the answer in MB.

(6 marks)

Duration	Colour resolution	Frame size	Sampling rate	Sound Resolution	Channel
0.8 minute	24-bit	320 by 240	44.1 KHz	16-bit	Stereo

Table 1

c. This display is designed to convey the messages or information from the beginning till the end for certain duration of time. Recommend the suitable type of authoring tools that can be used to develop this product. Provide **TWO (2)** reasons and **ONE (1)** example of the software to support your answer.

(3 marks)

End of Paper